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THE AMERICAN MUSEUM JOURNAL

Volume XII April, 1912 Number 4

American Museum of Natural History

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The American Museum Journal

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MARY CYNTHIA DICKERSON, *Editor*

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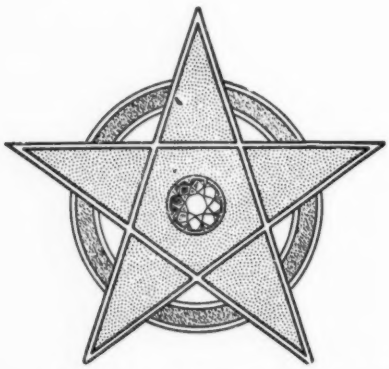
REAR ADMIRAL ROBERT E. PEARY, U. S. N.

Clay model of bust given to the American Museum by Mrs. Morris K. Jesup.



Medal of honor presented to Admiral Peary by the Peary Arctic Club on the third anniversary of the discovery of the North Pole. The star is made of polished fragments of the Ahnighito meteorite set in gold about a central diamond. On the circle of gold five of Peary's Arctic achievements are inscribed: "The Crossing of Greenland, 1892"; "Securing the Great Meteorites 1897"; "Insularity of Greenland, 1900"; "Farthest North, 1906"; "North Pole, 1909." The medal has been deposited with other Peary medals in the National Museum.

— "A Name for History: Peary," page 128

The American Museum Journal

VOL. XII APRIL, 1912 No. 4

PRESERVATION OF THE WORLD'S ANIMAL LIFE

By Henry Fairfield Osborn

AS a palæontologist I have a convincing sentiment toward conservation. In every student of the history of life, from its beginnings until to-day, there is born a sentiment for conservation. It springs from a long and intimate even though imaginary acquaintance with the world's animal life during vast periods of time. Every hunter of fossils puts himself backward in time and lives in imagination with his plants and animals. How could one trace the birds or the mammals through their arduous ascent from reptiles, through the vicissitudes of geographical and geological changes, without acquiring a peculiar admiration and sympathy for them? Thus through following its structural evolution from fragments preserved in the rocks, each creature gains historical and architectural as well as æsthetic value. Each becomes a living monument of adaptation and of beauty, which connects the past with the present.

All lovers of architecture regard the destruction of the Parthenon of Athens by Turkish cannon in the year 1687 as an act of barbarism. Yet it would be possible for modern archæologists and architects to restore this temple of Greece to a large measure of its former beauty and grandeur. It is far beyond the power of any men however, of all the naturalists of the world, to restore a single forest, a tree or flower, a bird or mammal, even a single vanished individual, let alone a vanished race: once lost, the loss is irreparable. Only nine years were required to build the Parthenon; it has taken millions of years to produce any single offspring of Nature. When an ax or a bullet penetrates the delicate living tissue, replete with this long history of contact with sunshine, oxygen, water and soil, a temple is torn to pieces.

Although done in the name of civilization, we may hold it an act of barbarism when we destroy a forest of spruce and grind it up into wood pulp to pass beneath the press of the "yellow journal." The progress of conservation marks the advance of a true, as distinguished from a false civilization. The conservation sentiment, feeble in its inception a few decades ago, becomes daily more powerful, owing in part to the general altruistic spirit of the times, in part to the direct efforts of associations like the Audubon Society, and to the writings of nature poets, like John Muir and John Burroughs, as well as of field naturalists, like Frank M. Chapman of our own Museum. Substitution of the camera for the shotgun is exerting its influence: the work of Kearton, of Shiras, of Schilling, Dugmore and Rainey, has spread a new knowledge of living animals.

In every part of the English-speaking world the principle of conservation is taking firmer hold on public opinion, as shown both in expression in literature and action in legislation. The lobbyist is becoming powerless because contending with a growing sentiment which is fast attaining strength in commercial interests. During the past two years the legislatures of states like New York, Massachusetts and New Jersey, have enacted laws prohibiting the sale of all wild game, and in several states laws have been passed limiting the use of destructive weapons. The United States and Canada have followed up their great measures for the preservation of their forests with the creation of animal preserves in several of these forests, in addition to setting aside other especial preserves for the bison and the prong-horn antelope. Great Britain has been equally active in Africa, and it is interesting to observe Germany and Austria now taking up the animal conservation movement and forming their own especial societies. Only the Latin countries, France and Italy, seem to be behind in a recognition of the necessity for the preservation of wild animal life.

Young foxes in one of the Museum's series of groups showing the mammals of New York State

It is gratifying to realize that the American Museum of Natural History has held from the first a position as one of the centers of the conservation movement. For among the hundreds of thousands who annually pass through the institution's halls are many who gain knowledge and an abiding interest in nature, the very mainsprings of the conservation idea. It is cause for congratulation also that the Museum's influence for the preservation of animal life is continually increasing as advances are made in methods of exhibition and public education.

THE STATUS OF FORESTRY IN THE UNITED STATES

By Overton Westfeldt Price

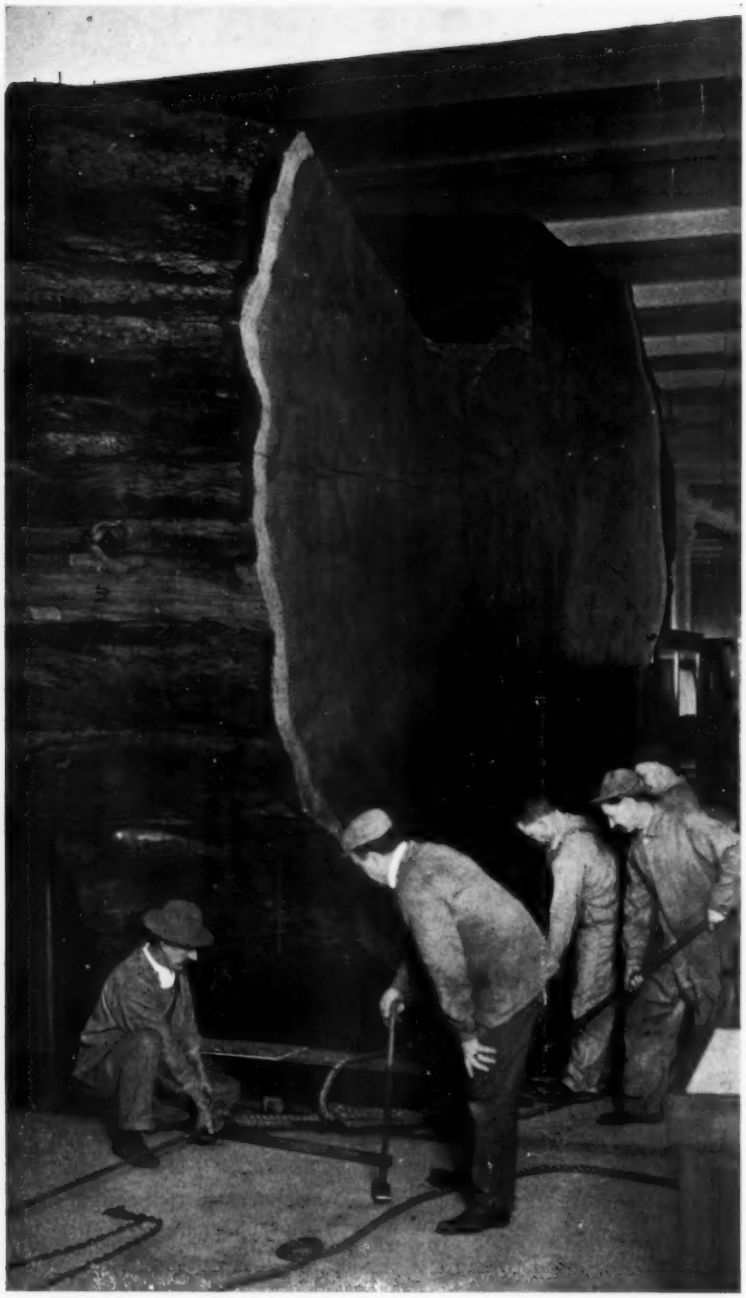
[VICE-PRESIDENT OF THE NATIONAL CONSERVATION ASSOCIATION, FORESTER OF THE LETCHWORTH PARK ARBORETUM, AND LATELY ASSISTANT UNITED STATES FORESTER]

THE fruits of the movement for forest conservation are the Forest Service, the national forests, and a public sentiment deep and strong for the preservation of all the forests of America. These are three assets for which the Nation may well be thankful, as it may be thankful for the man to whom it chiefly owes them. They constitute three of the great objects for which Gifford Pinchot has striven wisely and unflinchingly, and their accomplishment is in a very real and unusual sense a personal achievement.

What do these three things mean? The existence of our Forest Service means that the United States now possesses an organization animated by high ideals, permeated by the spirit of public service, trained and efficient, to handle the country's forests. The national forests themselves mean that two billion dollars worth of tangible natural resources are now protected and conserved by wise and regulated use. While in a public sentiment generally vigorous and informed, lies in the last analysis the surest safeguard of all for the perpetuation of the forest resources of America.

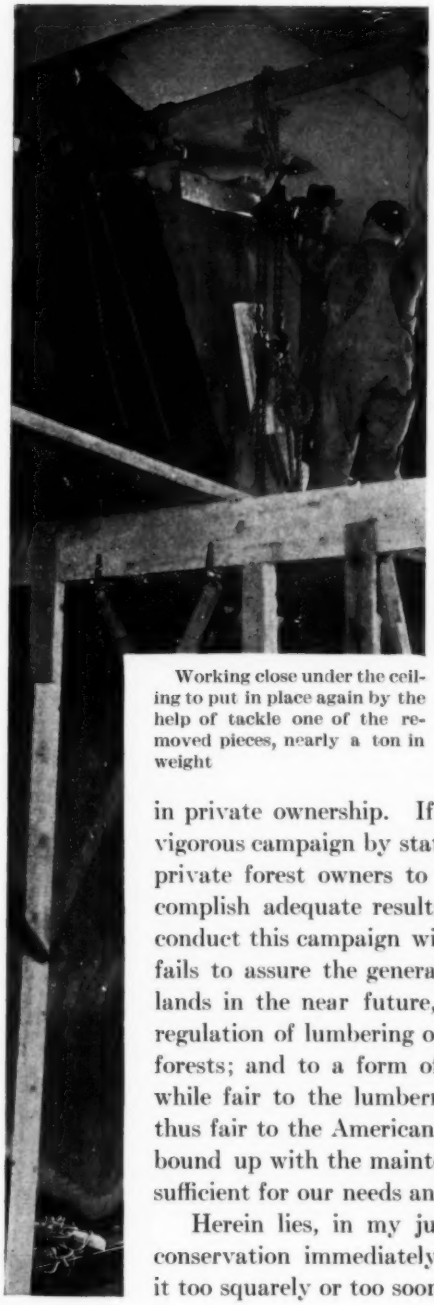
So much for the progress won in less than two decades. For twenty years ago, not a single national forest had been established; the Forest Service, now three thousand strong, contained less than a dozen persons; and except for a nucleus of devoted men and women alive to the urgent need for forest conservation, the American people were as yet in the main indifferent to the question of forestry. Now what must be added to these great accomplishments before all our forests are safe?

The Nation and all the States own about one-fourth of our forests. The other three-fourths are owned by lumbermen, farmers and landed proprietors. So far, very few of these private owners are practicing forestry. Probably less than one per cent of all the privately owned forest lands in the United States are being well protected from fire, or are lumbered carefully and wisely so that they will produce a satisfactory second crop. The reasons why private forest owners are so slow to practice forestry would make a long story, or rather a series of long stories. But there is nothing in any of them to show that forestry does not pay well enough to justify the individual in practicing it. The chief reason why it is not more generally practiced lies in personal desire for large immediate returns, in the traditional American attitude toward the forest as a thing to loot, and in disregard of the principle that the private ownership of large bodies of forest land is a public trust.



THE MUSEUM'S BIG TREE SECTION

This section, cut in 1891 and presented to the Museum by the late Collis P. Huntington, has recently been moved from the Darwin hall to the forestry hall. Standing too high (diameter, 16½ ft.) to pass through the doorway between the halls, it had to be lowered by the removal from the top of two pieces and a part of a third of the original twelve in which it was shipped from California. This left a weight of about seven tons which was supported on rollers to the new position



Working close under the ceiling to put in place again by the help of tackle one of the removed pieces, nearly a ton in weight

Unless our forests in private hands are properly protected and wisely used, we shall fail to solve our national forest problem. If forestry is not practiced generally and soon on private forest lands, then this country, well within the lives of many of us, will be in part, and possibly in large part, dependent upon other countries for its timber supply. If we do not raise enough wood for our needs, then the time inevitably will come when we must buy it elsewhere, as do England and Italy and Spain — for we cannot go without. This will mean the pinch of higher prices for wood and all its products, which all of us must feel.

So herein lies, as I see it, the next great task immediately before the movement for forest conservation in the United States — to get a prompt and real beginning made in the right handling of forest lands in private ownership. If the continuance and extension of a vigorous campaign by state and federal agencies, for educating private forest owners to the advantages of forestry will accomplish adequate results soon enough, then the money to conduct this campaign will be wisely spent. But if education fails to assure the general application of forestry to private lands in the near future, then the Nation must turn to the regulation of lumbering on private lands in order to save our forests; and to a form of regulation embodied in law which while fair to the lumberman, is also fair to the forests, and thus fair to the American people, whose welfare is inseparably bound up with the maintenance of a permanent wood supply sufficient for our needs and grown within our own country.

Herein lies, in my judgment, the urgent task in forest conservation immediately before us all. And we cannot face it too squarely or too soon.

A NAME FOR HISTORY: PEARY

A BUST OF REAR ADMIRAL ROBERT E. PEARY, ARCTIC EXPLORER, HAS BEEN PRESENTED TO THE MUSEUM BY MRS. MORRIS K. JESUP. ON THE ARRIVAL OF THE BUST FROM FLORENCE, WHERE IT HAS BEEN CUT IN CARRARA MARBLE, IT WILL OCCUPY A NICHE IN MEMORIAL HALL[1]

ON this April, 1912 marking the third anniversary of the discovery of the North Pole, there is full realization in public opinion of the imperishable record Peary made for himself in that attainment. Many had striven during more than three centuries; the triumph came to Peary, sailor, surveyor, civil engineer, and for twenty-three years Arctic explorer. Success however rested not merely on training and experience but also on the character of the man. He brought to the work the initiative and courage of executive power and a sufficient consciousness of this power to push always ahead — and it can be added, often at great personal sacrifice. It was this strength and knowledge of strength that inspired confidence in all associated with him, from the Eskimo who left his family to share the struggles against cold, fatigue and hunger, for a goal the importance of which he could scarcely appreciate, to the keen-sighted man of science or business who gave financial support to the work.

It was the grit of Peary that won the sixteen members of the Peary Arctic Club, which had its first meeting in 1899. Such was the belief in this man "of clear-eyed confidence who knew what he wanted to do and intended to do it," that the support would have been the same had his quest been the South Pole, or in the words of one of the members, "the moon or any other place." They shared the enthusiasm of this man who "put up such a splendid fight," who at one time "continued his work on crutches when the freezing of his feet necessitated the suffering attendant on the loss of seven toes."

The Peary Arctic Club in the recent official recognition of Peary with its medal of honor announced its work done. The Club, Peary and the Museum have been an organization of forces unusual because of unanimity of purpose. The late Morris K. Jesup, president of the Club, was a man who stood for results; Peary's aim during the entire twenty-three years was but a tremendous effort toward the realization of a vision in results; and the Museum has always been a place where the example set by those

[1] The other marble busts in memorial hall — the work of the same American sculptor — were unveiled on December 29, 1906 and were the gift of the late Morris K. Jesup. They represent the following men of science: Benjamin Franklin, Alexander von Humboldt, John James Audubon, John Torrey, Joseph Henry, Louis Agassiz, James Dwight Dana, Spencer Fullerton Baird, Joseph Leidy and Edward Drinker Cope.

high in its organization has been followed in a pressing forward for results. The triumvirate worked together with unquestioned loyalty, the Club in its share proving constantly its breadth of view and its generosity, so that Peary planned his work without particular instructions from his supporters and the Museum was always custodian of all collections without supervision. Members of the Club give the highest credit to Mr. Jesup and to Peary: it was the faith of these two that kept the work in continuance. Mr. Peary used his own money for the early trips and Mr. Jesup was by far the largest contributor later, while other liberal supporters were General Thomas H. Hubbard, president of the Club to-day, and the late Mr. George Crocker.

The records of the Museum from 1895 to the landing of the Roosevelt after the last expedition, contain long lists of Arctic possessions, and there accompanies these lists even as far back as 1902 a note to the effect that the American Museum is undoubtedly the richest in the world in collections from Arctic America. There are musk ox, polar bear, walrus, seal and caribou, including the white Peary caribou, as well as large series of small mammals and of birds. There are various sledges, among them the "Morris K. Jesup," that strong flexible sledge which made the journey to the Pole in 1909; besides Eskimo costumes of many kinds and other objects representing the culture of the Arctics. In addition there are the clothing, rifles, and surveying and other instruments abandoned at Fort Conger by the Greely expedition. The best-known objects in the Museum representative of Peary's energy in Arctic work are the three meteorites from Cape York, Greenland, the two smaller obtained in 1895, the "Ahnighito" meteorite weighing thirty-six tons, in 1897. These constituted the secret "Iron Mountain" of the Eskimo from which the tribes obtained metal for knives before a supply reached them as a result of the visits of explorers.

The five achievements named on the Peary Arctic Club medal [Frontispiece] are of magnitude to exalt the name of Peary for all time, but moreover as long as histories are written and men love the heroic, the statement of the events will be coupled with a story of the dogged will of the man, of his pluck. The bust by Mr. Couper to be added to the other busts in the Museum's memorial hall through the generosity of Mrs. Jesup, wife of Peary's staunch supporter, shows the face of a dauntless man, one who has suffered much without yielding. Looked at by another generation, and in another perspective, it will tell the greatest story of endurance and steadfast purpose in the history of the earth's conquest of land and sea, and although the historian may explain that recognition and fame came to this explorer while he was yet in the prime of life, the stern yet chastened lines that the sculptor has given the marble will seem also to suggest the familiar story that no greatness is won without some misunderstanding from contemporaries.

Polovina rookery, St. Paul Island, July, 1897, showing close aggregation of the seals in harems, and scattered idle bulls outside. "The fur seal is highly polygamous, the average family consisting of a male and thirty females while the birth rate of the sexes is equal. There is thus a large number of bachelor seals. . . . .These bachelors keep by themselves, approaching the breeding grounds literally at the peril of their lives"

Polovina panorama showing idle bulls, to the left of the breeding ground pictured above

Two haremless bulls in controversy

THE FUR SEAL

By Frederic A. Lucas

In the hall of northern mammals is a small group of the Alaskan fur seal, the species that for many years has been the chief source of our sealskin cloaks. Forty years ago, when we purchased Alaska, the fur seal herds of the Pribilof Islands numbered between three and four millions; to-day, through the effects of pelagic sealing, there are not 150,000 fur seals left. No animal has been the source of so much profit to the United States as has the fur seal; none other has cost so many millions as have been expended in efforts to terminate pelagic sealing and preserve the seals. It has been the source of endless international disputes and voluminous diplomatic correspondence. So much has been said about the necessity of a total cessation of killing both on land and sea, that it may be well to call attention to the fact that killing on land is confined to young males of the bachelor class, whereas probably eight out of every ten seals killed at sea are mother seals whose young necessarily starve to death. The following article states some of the biological facts, from which the reader may draw his own conclusions. Dr. Frederic A. Lucas was a member of the Fur Seal Commission of 1896 and 1897, especially charged with the investigation of the breeding habits of the fur seals and the causes of mortality among them. He has since been a member of the advisory board of the Fur Seal Service.— Editor.

THE recent treaty between the United States, Great Britain, Russia and Japan, with a view to the suppression of pelagic sealing, is one phase of the conservation movement, the all but too late effort to preserve something of our wild life.

Few animals can be more readily protected than the fur seal, few would yield better results from a purely cash standpoint and few are more in need of protection. For years the herds have been decimated by pelagic sealing with its wasteful slaughter of breeding females and attendant starvation of their young.

Many things have stood in the way of protecting the seal, not the least of which is the fact that the high seas are free to all, and that it required a general agreement of important maritime powers to make protection of any value. That Canada had no fur seal herd, and that the fur seals of Japan were all but exterminated were other factors to be reckoned with, for both

An alarmed harem. The bull is at the extreme right

these countries were profiting at the expense of others by killing fur seals on the open sea.

The regulated killing of young males on land has caused no decrease in the fur seal herd any more than the systematic killing of cattle and sheep depletes the stock-raiser's herds and flocks. This is due to the fact that the fur seal is highly polygamous, the average family consisting of a male and thirty females, while the birth rate of the sexes is equal. There is thus a large number of bachelor seals (as they are appropriately called) and these it is, that under certain restrictions, are killed on land. These bachelors keep by themselves, approaching the breeding grounds, or rookeries, literally at the peril of their lives, and hang about the islands or gather on land in great bands at certain well-defined places, known as "hauling grounds," where they sleep for days at a time.

Our fur seal group in the Museum is necessarily untrue to nature because in endeavoring to give a comprehensive idea of the fur seals, it shows a

A sleeping bull with a portion of his family. Kitovi rookery, St. Paul Island, 1897

bachelor in company with an adult male and female. The little yearling belongs there, because yearlings are permitted to come to the edge of the rookeries where they play with the baby seals or pups, so-called because they suggest fat little Newfoundland puppies.

The fur seal belongs to that division or group of seals known as eared seals, from the possession, in contrast to their relatives, of useless little ears which seem to serve no good purpose save for classification. All the members of this group have long, bare front flippers and have the ability to stand on all fours and to walk about on land, somewhat awkwardly perhaps, although for a short distance even a big fur seal can sprint almost as rapidly as a man.

The best known of the eared seals is the California sea lion, which is to

Young Steller's sea lions at Ano Nuevo, one mile off the California coast opposite Pescadero. Both young sea lions and young seals are puppylike and inoffensive. The sea lion or fur seal mother will not care for other than her own offspring; thus killing at sea results in a large loss in starvelings at the rookery

be found in every zoölogical garden and of late years has become familiar to us as a performer on the vaudeville stage. It is much more tractable and intelligent than the fur seal, which is stupid and intractable though making up what it lacks in reasoning power in highly developed instincts.

The most remarkable among these is the homing instinct, the ability to return to the spot where it was born, a power much more wonderful in a creature whose course lies over the sea where there are no possible landmarks to guide it, than in birds that can at least see for several miles about them. Year after year, as regularly as the seasons roll around, the seals return to their homes on the Pribilof Islands after a six months' absence. When

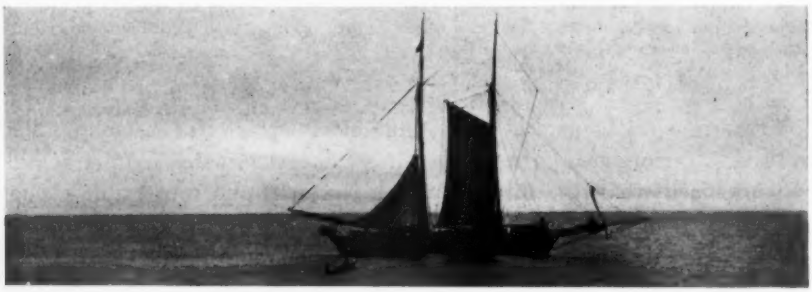
they leave in November or December, they strike boldly southward[1] to the latitude of San Francisco, and then turn and work gradually northward, reaching the islands in June. Here the fur seal passes the summer, a large portion of the time on land, for of all amphibious mammals the fur seal most truly deserves that name, and here it rears its young, or rather here its young is reared, for the mother seal shows no maternal spirit towards its little one other than to nurse it.

It may seem strange that on our coasts the fur seal should be found only on two small islands and that on the Asiatic side it should be confined to a few isolated islets, but this is probably due to its habits. A creature that spends at least a quarter of its time on land, where it is readily killed, must have offered an easy prey to primitive hunters, and so centuries ago it became restricted to islands unvisited by man.[2]

The fur seal long ago would have been swept out of existence but for the fact that the breeding grounds are carefully guarded, and while the herd is but a tithe of its former size, it still comprises many thousands. If pelagic sealing can be brought to an end, the seal herd will recuperate rapidly, even though the death rate is high and not more than half the seals born in any one season live to return the next. Whether or not this desirable end can be brought about remains to be seen, and some of us are not very hopeful. The policy of many members of the present generation seems based on the famous dictum of Sir Boyle Roche, "Why should we do anything for posterity, what has posterity ever done for us?" and immediate profit is an ever-present stumbling block in the path of conservation.

[1] The females and young do this, the old males for the most part winter in the Gulf of Alaska, and are the first to return to the islands in the spring.

[2] We have a parallel case in the great auk which was found at one or two places and was promptly exterminated.



It is pelagic sealing which is disastrous to the herds, not land killing which can be controlled and includes only bachelor seals

MODERN CHINESE COLLECTIONS IN HISTORICAL LIGHT

WITH ESPECIAL REFERENCE TO THE AMERICAN MUSEUM'S COLLECTION REPRESENTATIVE OF CHINESE CULTURE A DECADE AGO

By Berthold Laufer

THE transformation of the Chinese Empire from a theocratic-patriarchal system of government into a modern commonwealth on a constitutional and republican basis, effected within the span of a few months, is sure always to remain one of the unique phenomena in contemporaneous events and certainly one of far-reaching consequence for the future history of the world. Whether there possibly is a causal connection between this singular fact of the rejuvenation of the oldest existing nation and the construction of the greatest wonder of modern engineering, the Panama Canal, is a matter to be left for individual speculation. Certain it is that the China of the future will rank as the second greatest republic, and that the completion of the canal will bring into closest touch the two foremost republics of the world. The republican idea reverberates over the waters of the Pacific from one shore to the other. The Pacific now recapitulates the spectacle seen when culture development was largely concentrated around the Mediterranean, and reached its climax in the republican governments of Greece and Rome.

The fundamental reform of Chinese government, of law, finance and education, of commercial and industrial factors will naturally result in a proportionate change of the entire culture of the country. Such a change has gradually set in since 1900 and has gone a rapid pace during the last

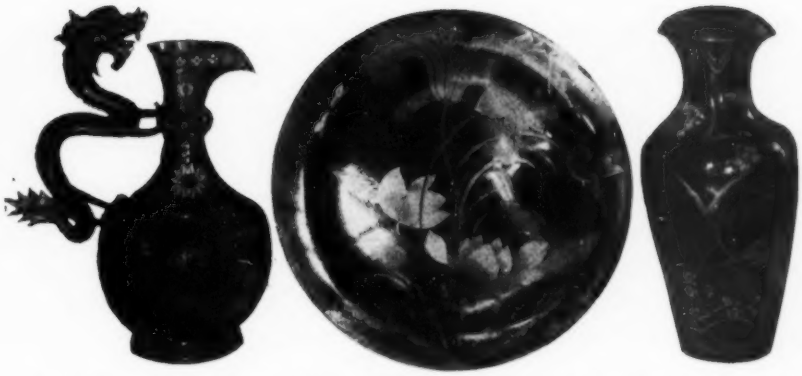
Masks used in mystery plays in Peking, at the left an aërial demon, at the right a graveyard ghoul. The central mask represents one of the four Great Kings of Heaven; in the gates of almost every Buddhistic temple in China are colossal clay statues showing the golden crown, the large rings in the ears, the wide open mouth surrounded by flames

Chinese ancient bronzes. Some of the bronzes in the American Museum are 3000 years old. The "flower vase of a hundred rings" represents the Sung dynasty, 960–1126 A. D.

few years. The days of antiquity which once formed the source of a delightful object-lesson for the ethnologist have thoroughly vanished, and the process of modernization is pervading all departments of activity. In this state of affairs, we are bound to raise the question, what is the present significance of ethnological collections made in China a decade ago? Nobody competent to judge will hesitate to say that the same importance is due to them as to collections secured in Japan before the era of the restoration. A scholar who recently tried to make a collection in China wrote to me on his return to Europe a short while ago: "You deserve congratulation for having seized the right opportunity; it is impossible to do at the present time what could be done ten years ago."

It should be borne in mind that the ethnology of China is a subject of greater complexity than that of primitive groups of peoples, and that the extent of a country equaling the United States in area tends to set a well-limited purpose before the eyes of the individual explorer. Something like a complete collection from China does not exist anywhere nor is it ever likely to exist in any museum; but there is ample reason for satisfaction, that we now discover in our collections many series of objects which exist no longer in China.

The Chinese collection in the American Museum illustrates the home industries and the social life of the common Chinese people of ten years ago and represents China as a living culture organism. The collection was made according to a scheme similar to the one which an ethnologist would follow up in the study of a primitive group. However simple and plausible this may sound, the fact remains that such a plan had never before been carried



In the antique cloisonné of China there were used enamels in solid pieces and in a powdered state to show thirty-one different shades. The secret of many of the colors of the Ming dynasty is now lost

out, as illustrated by all museums of Europe in which China is represented merely by a fortuitous accumulation of curios picked up at random here and there.

The most costly porcelains and the superb treasures of imperial palaces do not reveal the spirit of the Chinese people; but we see in their daily life surroundings, in their games and pastimes, in their shows and masquerades, in their domestic cult and decorative art, precious documents bearing on their psychology. The tendency to systematic effort brings out also the idea that many Chinese methods and techniques are just as primitive and surely as ancient as those of the so-called primitive races, and that it is only a comparatively higher development and a greater unity and uniformity of thought as the final result of this vast culture area, which seemingly impress upon China the stamp of a singular position. Her agricultural implements still bear the indelible character of a prehistoric antiquity and have hardly undergone any signal change during four thousand years. In the treatment of copper and iron, the ancient methods as practiced in the bronze and iron ages are still partially adhered to, and the technique of basketry may tempt the student to comparison with the productions of our California Indians. The Chinese composite bow, in all probability the best bow ever made, is the same as the one used by the ancient Persians, Babylonians, Egyptians and Greeks; and this is not the only instance where China can triumphantly furnish the real thing which we would seek in vain in the other centers of ancient civilizations. In fact up to the fatal year 1900, China was the only country where the life of antiquity was really still alive, and whence a sound basis for an attempt at its reconstruction could be derived.

These chances are now upset, the romance of China has died away with the end of the chivalrous Manchu dynasty. The products of home industries will give way to the clatter of machinery and foreign imports. In

this rapid period of transition and radicalism, most of the things displayed in our collections now belong to the past and have become, so to speak, antiquities all of a sudden overnight. For example, it would be impossible at the present time to duplicate the collections of armor, because the military examinations in which all these weapons were formerly employed have been abolished for a number of years, and the makers of them have consequently run out of business. In 1902 I chanced to meet but one man in a suburb of Peking, capable of manufacturing bows, arrows, cross-bows and halberds in compliance with the official regulations; and all paraphernalia required in the training by the competitors for military posts could then be procured even in complete sets only with a large amount of labor, study and time. These now represent precious records of the past whose primary ethnological importance cannot be underrated. In the same manner, costumes, personal ornaments, kitchen and household utensils, furniture, coins, weights and measures, means of heating and lighting, means of transportation, games and sports, religious customs have rapidly changed or wholly disappeared under the influence of the intruding foreign ideas. The flag of the new republic will doubtless complete this great movement and have many other surprises in store for us.

Chinese collections, and especially the very complete collection in the American Museum, have thus become of historical significance in that they are illustrative of the life of imperial China of bygone days. In the present stage of our political, commercial and industrial relations with the East, everything that pertains to China seems to us of paramount importance, practical and theoretical. If the manufacturers of this country had taken the trouble to study the native industries of the Chinese and their products in museum collections with a view to adapting our manufactures to their peculiar needs, American business with China would have assumed much larger dimensions. But we are confronted with more ideal tasks than that: if fate has treated us kindly in presenting us with a share of the big inheritance of Chinese culture, it seems to me it becomes also our moral obligation in the interest of the living and the future generations, to preserve the record of this story in the memory of man. Ethnologists are a life-saving crew which have the duty of rescuing perishing cultures and peoples from wreck. When China shall take her place among the nations of the world, the time will also come that students will flock to our museums to study her ancient culture seriously, and that Chinese collections made in the past will be treated with the same respect as are now Siebold's Japanese collection in Holland or the Cook Polynesian collection in London.

Editor's Note: Dr. Berthold Laufer, Oriental explorer and scholar, is curator of East Asiatic ethnology in the Field Museum of Natural History, Chicago. From 1901 to 1904 he was leader of a Chinese expedition for the American Museum of Natural History, carried on under the auspices of the East Asiatic Committee with Jacob H. Schiff the chief supporter. This time he gathered together the largest and most representative collection ever brought out of China.

CONVERGENT EVOLUTION IN ETHNOLOGY

By Robert H. Lowie

THE doctrine of evolution as commonly understood means the divergence of forms from a common point of origin, similarities of structure between different species being accepted as an indication of blood relationship. Biologists however have long ago abandoned the notion that all resemblances must be due to a common origin. Thus, Lankester has distinguished homologies that depend simply on the inheritance of a common part from homologies that depend on the action of like conditions on such homogenous parts, or on "parts which for other reasons offer a likeness of material to begin with." And Osborn has illustrated the point by the example of mammalian teeth, the primitive three cusps common to all mammals exemplifying the inheritance of common parts (homogeny) and the eight cusps that develop or may subsequently develop in different orders in a uniform manner exemplifying Lankester's second process (homoplasy). In addition of course, there may also be convergence toward a similar structure on the part of unrelated animals, or mere analogy of function without far-reaching morphological resemblances.

In ethnology, in the study of the development of human culture, the emphasis has hitherto been almost entirely on divergent evolution and resemblances have been interpreted as due either to a psychology common to all humanity or to borrowing; that is to say, in either case resemblances have been conceived as genuine homologies due to a common cause. In recent years however, several distinguished students, borrowing the concept of convergent evolution from the biologists, have shown that the older mode of reasoning should be subjected to revision. A few concrete examples will make their position somewhat clearer.

One of the most widely discussed of ethnological problems is that of exogamy — the fact that in many primitive communities the tribe is subdivided into social groups, members of any one of which are forbidden to intermarry. Transgressions are usually regarded in the light of incest and may be punished with death even where no blood relationship obtains between fellow-clansfolk. In other words, the kinship within these "clans" or "gentes" is in a measure fictitious from our point of view. Moreover as membership in a group is inherited either through the father or the mother, the clan or gens bond is a one-sided relationship that neglects to take into account either the maternal or the paternal side.

Now this type of clan or gens affiliation has been commonly supposed

to be an early form of relationship recognized in human society before the recognition of kinship by blood; and the exogamous rule has been deduced from this primitive conception of relationship. That is to say, no matter where exogamous social units have been found, the tendency has been to assign a uniform cause for their existence. Obviously this would not be justifiable if we were to discover cases in which blood relationship was recognized and where the feeling against marrying within one's own social group was simply a special application of the principle that one must not marry persons related by blood. This is precisely what Wissler has found among the Blackfoot. There is no doubt about the fact that the bands or gentes of this tribe are exogamous. The question is, "are they exogamous because the Blackfoot regard the band as the unit of relationship, or because all the members of a band happen to be real blood-relatives?" Wissler's data indicate that the latter alternative represents the facts. Here then we have an illustration of convergent evolution. The feeling of clan or gens affiliation in other tribes and the feeling of blood-relationship among the Blackfoot have produced a similar result, the rule of exogamy for definite social groups. As a matter of fact, the analogy is due to our classifying together the similar behavior of the Blackfoot band members and the clansmen of other tribes. As soon as we consider the subjective attitude involved in the two cases, the resemblance proves to be merely external.

The subject of totemism furnishes another example. Totemism is usually defined as an association between certain social groups and certain species of animals (the totems), and most theories of totemism, however different in other respects, derive the institution from some single psychological point of origin. But quite recently Goldenweiser has shown that this procedure is indefensible. Totemism in Australia has no more to do with totemism in America than the whale with fishes or the bat with birds. What has taken place is the independent development of certain superficial resemblances that are currently summarized by a common label.

As indicated by these examples, there are logically two forms of the process of convergence that may be distinguished. Either we may have the independent development of identical customs or other cultural features; or there may be merely a tendency toward superficial resemblances, which however are at first mistaken for genuine homologies. In the latter case, our problem reduces itself to that of revising the classification of ethnological phenomena. Up to the present time there has been very little evidence of genuine convergence in the sense of independent development of identical forms from distinct points of departure; but the apparent convergence due to erroneous modes of classification may be exemplified in many branches of ethnology and proves to be one of the most stimulating subjects for discussion at the present day.

The tribes of the outer Teva districts gathering at Papéete for their annual feast, bringing their gifts and their allegiance to the hereditary head chief

THE SONGS OF TAHITI

By Henry E. Crampton

During Professor Crampton's voyages to Polynesia for biological research, he visited Tahiti four times and becoming interested in the native songs made phonographic records in several districts. It is hoped that in the near future these records, some fifty in number, may be transcribed and made available for a broader usefulness.— Editor.

ONE of the most marked characteristics of all the natives of Polynesia is their love for music. Their happy adolescent character finds ready and natural means of expression in the choral singing in which they greatly delight, and in the active rhythmic dances with which they so often accompany their songs. The traveler soon becomes interested in these "arts of pleasure" that are practiced in characteristic ways by the Tahitians, Hawaiians, Samoans and Maoris above all other people of the Pacific.

It may be that their singing is first heard at night when arriving at one of their primitive villages far distant from the mixed civilization of commercial towns. In a large thatched hut or a more elaborate "church" the natives gather after the evening meal to sing perhaps all the night through. From a little distance the music sounds as though it were produced by a splendid reed organ or by an orchestra of wood-wind instruments. Through the open doorway the people may be descried in the half light, seated in rows, with the women toward the front, the older men next and the youths toward the back. The last-named drone out the full deep notes of the lowest bass, thus giving to the whole harmony the organ-point support which so impresses the hearer even at his first experience. The older men weave their tenor strains through the harmony of the song in complete accord with the other voices or, singly, they may sing a peculiar erratic strain of a few bars before they return to the conventional part which is

theirs. The women sing two and sometimes three or four parts in alto and soprano. Often a single female voice will depart from the others for a time to give a shrill, wild call like that of a piccolo, in the same way that the tenors sometimes do. No instruments are used by way of accompaniment; only the full rich tones of the wonderful voices are heard.

Three and four times a week the people so gather, impelled by sheer love of their vocal art. Scores of songs are sung, all of them known only by tradition. Very few indeed of even the better educated natives understand written or printed words. But when mere babes they go with their parents to the houses of song, and thus gradually acquire the tribal knowl-

A circle of natives beating the ground with their hands to give the rhythm for the dances of the maidens in the center

edge of music. Ordinarily it is one of the women who leads. After there has been an interval of chatting and smoking, this leader starts with two or three high notes, and then the others join with their proper parts as though an orchestral conductor directed them with movements of his baton. From the first-sung notes, all recognize the melody and know through their continual practice what are their allotted parts.

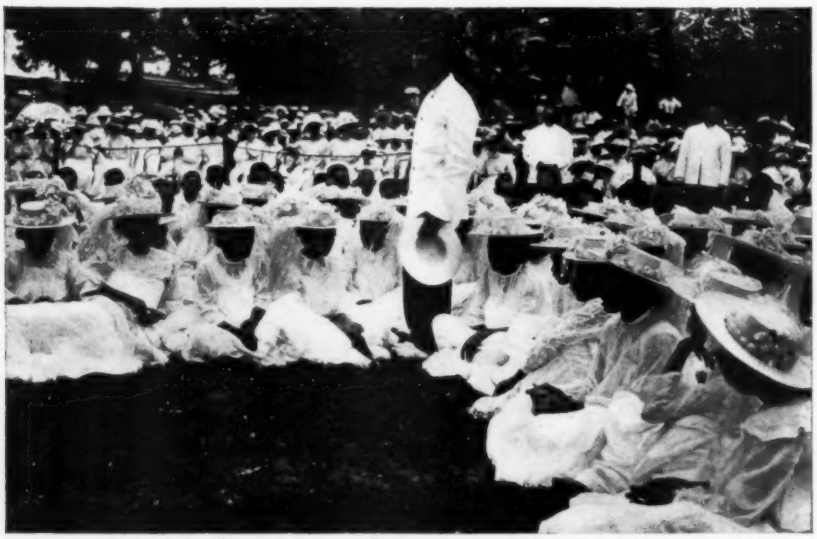
At the time of the Great Feast in July the people of Tahiti come together in Papéete for a week's enjoyment, during which they compete, village by village, for prizes bestowed for the best singing and dancing, for accuracy in throwing the spear and for other accomplishments. In preparation for this great time, singing practice has been held almost

Group of native girls of Papara in ancient costume. These were the paddlers of the great double canoe decorated for the feast

Men of a distant district of Tahiti, wearing a somewhat modernized form of the ancient costume

nightly; food has been collected for days; and with all their finery the natives come in schooners or canoes or on foot to lodge simply in the barracks of the town. On the appointed day they are called group by group into the public square which is bordered by hundreds of friends and rivals, everyone stimulated by all the circumstances to do the utmost for the honor of his district. It is at such times perhaps, when the singers may number two hundred or more, that their music is heard to best advantage; yet the setting of their own villages far away is somehow more pleasing and congruous. If the chorals are analyzed, they fall into two general classes. Most of them are in the major strain, and their words recount the prowess of old-time warriors and tribes, or describe religious personages or events, as in many of the modern chants. In these there is the quick beating rhythm of the war-time tread or of the dance. More interesting are the songs in minor key: they express the sorrow of a people wailing for those killed by cyclone and tidal wave, or mourning for the old order which has passed away forever. For well they know that the future has no place for their fast-vanishing race, and they voice their sadness in wild melodies.

Each large section of Polynesia has its own characteristic forms of song as well as of the dance. In Hawaii the "hula-hula" seems to have a great effect upon the melodies; the "haka" of the Maori sets a measure that is carried out in the songs of that people. In Samoa the natives sing as they swing at the oars of their whale-boats during their journeys around the shores of the islands, and a slower rhythm is thus imparted to their music. In all groups of the islands however, the major and the minor chant can be found, although differences in form and effect have been developed in each case.



The singers of Papara at the time of the annual feast, ready to begin their chant as they sit in the great square surrounded by friends and rivals

WHERE THE BEAVER IS PROTECTED

By Barnum Brown

The following personal observations on the American beaver in Alberta in 1911 present an optimistic outlook as to the increase of this important fur-bearing species under protection. Mr. Brown had unusual opportunities to gather accurate knowledge of the condition of the beaver during two consecutive summers, when he slowly drifted with a houseboat down the Red Deer River hunting for Cretaceous fossils.— Editor.

THE American beaver formerly had a wider distribution than any other mammal except the puma. Its range extended from Alaska to California and Arizona, across Canada, from Hudson's Bay along the Atlantic Coast as far south as Georgia and northern Florida, thence along the Gulf of Mexico as far as the Rio Grande, and some distance into Mexico. Inland it inhabited many rivers and small lakes over most of the states. At present comparatively few colonies are left within the boundaries of the United States, although most states in which they are found have laws protecting them.

Small poplar grove cut down by beavers. Most of the trunks and branches have been dragged to the river one hundred yards distant

From the earliest explorations the history of Canada has been interwoven with the beaver. The unit of barter between the Hudson's Bay Company and the Indians was formerly a beaver skin and to-day the crest of the Canadian Dominion is a beaver. In the northwestern part of Canada beavers are still quite numerous, especially in the "muskeg" regions. They are protected in New Brunswick until July 1, 1912, and in Alberta until December 31, 1912. In the unorganized territories there is an open season from October 1 to May 15. Laws to protect the beaver during a period of several years or indefinitely are most urgently needed and it is unfortunate that there should be any open season at present, for streams are now being repopulated where since settlement, beavers had almost completely disappeared.

In a journey of two hundred and fifty miles down the Red Deer River, Alberta, in 1911, I counted thirty-seven occupied beaver houses, five of which had been built since 1910 when a half of this distance was traversed. One particularly large colony observed the year before and known to contain eight individuals had been destroyed, presumably trapped as the burrow had been opened.

A beaver in the New York Zoölogical Park [Photograph secured through the courtesy of the New York Zoölogical Society]

A large dam and two colonies were seen in one of the small tributaries, but dams are unnecessary because the river is sufficiently deep not to freeze solid and the lodges or houses are built near deep holes. The beaver's main sleeping-burrow is underground but above water, while the entrance to the burrow is below water, and on this river at least is invariably covered with willows interlocked in such inextricable manner as to resist the force of ice jams during the spring thaw.

On the Red Deer River, beavers apparently feed only on the bark and twigs of young poplar trees. Birch trees growing in poplar groves had not been touched. These skillful little "woodmen" gnaw down whole groves of poplars, and I rarely saw any tree that had lodged in falling even where they had cut trees on both sides of a deep ravine. After the tree falls they cut it into sections from two to four feet long. Some trees were eight inches in diameter and the sections weighed no less than a hundred pounds each. Where a considerable number of trees had been cut some distance from the river, there was always a regular runway, well beaten and cleared of all stones and brush. Reputable witnesses told me that they had seen beavers drive their front teeth into logs to drag them backward to the water. Although I did not see this operation, I did see several logs with scars of front teeth on them in such position that it seems most probable that this is the beaver's method of taking logs down the runways. As soon as the log reaches the water, it is pushed in front of the swimming beaver till it reaches the house. After the bark has been gnawed off, the log is cast adrift. I never saw logs on shore that had been gnawed.

We rarely saw beavers during the day as they are nocturnal in habit, but on moonlight nights we often watched them from some clump of willows. No matter how skillfully we concealed ourselves however, their keen scent detected us within a short time. There would ensue a great splashing near shore, accompanied by many a resounding "whak," as the beavers in diving struck the surface of the water with their broad tails.

Beaver lodge on an island in the Red Deer River three miles above Tolman Ferry. This lodge sheltered eight beavers in 1910. In 1911 it was deserted, the burrow having been opened by trappers

Some people who live near the rivers say that because the beavers cut down so many trees they should not be protected. From my own observation, they destroy only young poplars which at best make very poor fence posts. If rigidly protected for another twenty years they will increase to such numbers that many may be killed each year thereafter, under proper restriction, without seriously decreasing the supply. Thus a source of considerable wealth may be conserved and one of the most valuable fur-bearing species be perpetuated.

AN EXPLANATION

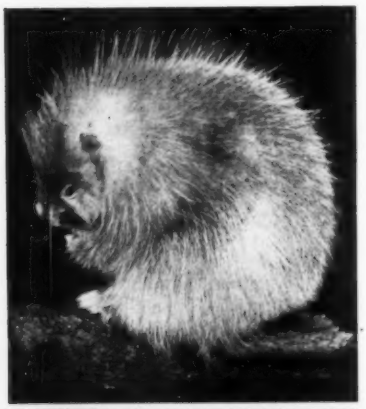
An article appeared in the December, 1911, issue of the JOURNAL entitled "Fossil Hunting by Boat in Canada." It was the intention of the writer to describe the unique method of securing fossils and to give some of the observations that seemed most interesting.

It was not claimed nor intended to be understood that this was the first time that fossils had been secured from the Red Deer River. Their existence has long been known and fossils had previously been collected from the river by members of the Canadian Geological Survey.

BARNUM BROWN

THE PORCUPINE IN MAINE

A RECENT addition to the variation series[1] for the Darwin hall is a fine albino Canada porcupine, obtained from "Flint, the Porcupine Man," who turns the porcupines of Maine, usually considered a nuisance, to good account by harboring them in his woodlands and supplying them to zoölogical gardens. Some years ago the state of Maine put a bounty on porcupines, the principal result of which was to show that the state's supply of porcupines was greater than its supply of dollars. A letter received from Professor W. Lyman Underwood of the Massachusetts Institute of Technology states authoritatively the situation in Maine, and all who have studied the question of the country's wild animal life in regard to preservation, where not directly in opposition to the interests of man, will appreciate the following quotation:



For several years prior to 1903 some of the lumbermen of Maine tried to get the legislature to do something to exterminate the porcupines, which they claimed were killing a great many hemlock and poplar trees. To this end in the year 1903 the town treasurers of the state were authorized by the legislature to pay a bounty of twenty-five cents for each animal that had been killed, the front feet and the nose to be handed in as evidence. The state appropriated four thousand dollars to pay these bounties.

As you know, the legislature of Maine meets only once in two years. In the two years in which this law was in effect over 146,000 porcupines were killed and paid for at an expense of something over $36,000. In the little town of Princeton, Maine, whose population then was 1100, the treasurer paid the bounty on 2600 porcupines in the first eight months. At the next meeting of the legislature the law was very properly repealed.

In my opinion more timber was lost in the two years in which the bounty was in effect than could have been charged to the porcupines for half a century. Porcupine hunters were responsible for this loss of timber. Men and boys roamed the forests after porcupines. Many fires were started by irresponsible people; trees were cut down to dislodge the animals where the hunters did not carry any guns. I have heard timber owners themselves speak of the damage done by the hunters.

From my own personal observation I have never seen any very extensive damage to trees done by porcupines. Now and then I find a poplar tree whose top has been pretty well eaten up, and sometimes small hemlocks where the bark has been taken off by these animals. Of course they do get into a good many camps and do some damage in that way, but personally I would much rather see the creatures around in the woods than have them exterminated.

[1] Among the exhibits in course of preparation for the Darwin hall, are series illustrating variation under domestication and variation in nature, the last to include such accidental or abnormal variations as albinos and melanos.

MUSEUM NOTES

SINCE the last issue of the JOURNAL the following persons have been elected to membership in the Museum:

Patron, MR. JOHN A. GROSSBECK;

Life Members, MRS. CHRISTOPHER M. BELL, MRS. JOHN G. MCCULLOUGH, MRS. JAMES MCLEAN, MRS. WILLIAM F. MILTON, MRS. WILLIAM WALTER PHELPS, MRS. BYAM K. STEVENS, MISS ROSINA S. HOYT, MISS IDA H. OGILVIE, HON. JOHN B. JACKSON, DR. AUSTIN FLINT, JR., and MESSRS. RICHARD CANFIELD, EDWARD PEARCE CASEY, PERCIVAL FARQUHAR, MAX C. FLEISCHMANN, DALLETT FUGUET, GEORGE L. HARRISON, JR., WALTER SCHUYLER KEMEYS, CHARLES W. LENG, JOHN D. RYAN and L. STUART WING;

Sustaining Members, MESSRS. LOUIS BREY amd J. K. ROBINSON;

Annual Members, MRS. JOHN S. BARNES, MRS. F. FORSCH, MRS. THOMAS HASTINGS, MRS. GEORGE GRANT MASON, MRS. WILTON MERLE-SMITH, MRS. THEODORE F. RANDOLPH, MRS. OGDEN MILLS REID, MRS. SAMUEL SLOAN, MRS. ANDREW H. SMITH, MRS. FREDERICK A. SNOW, MRS. EDWARDS SPENCER, MRS. E. C. STURGES, MRS. GEORGE H. TAYLOR, MISS R. A. POLHEMUS, MISS HENRIETTA PRENTISS, MISS CORNELIA PRIME, MISS JOSEPHINE C. SMITH, REV. W. H. OWEN, JR., and MESSRS. ASHBEL H. BARNEY, CHESTER A. BRAMAN, REYNOLD COHEN, C. L. COLLINS, RICHARD C. COLT, FREDERICK H. CONE, RUSSEL DART, L. C. DEMING, ROBERT A. FLIESS, GEORGE J. FORAN, A. A. FOWLER, ARTHUR H. HAHLO, FRANK B. HIGHET, CASPAR W. HODGSON, GEORGE F. KLEINBERGER, WOLCOTT G. LANE, JOHN E. MADDEN, CHASE MELLEN, DAVID M. MINZESHEIMER, A. HENRY MOSLE, JAMES M. MOTLEY, W. P. NORTON, WILLIAM A. O'CONNOR, ARIO PARDEE, EUGENE C. POMEROY, RUEL W. POOR, WILLIAM B. POTTS, RICHARD C. RATHBORNE, G. THEODORE ROBERTS, CHARLES G. ROCKWOOD, WILLIAM H. ROCKWOOD, HERBERT A. SCHEFTEL, J. C. SLOANE, WILLIAM H. SOULS, GINO C. SPERANZA, HOWARD W. STARR, S. FREDERIC TAYLOR, J. H. TOWNSEND and FREDERICK K. VREELAND.

GROUND was broken March 20 for the construction of the new southeast wing facing Central Park, which will add four new exhibition floors to the Museum, the first to be devoted to the geography and life of the sea. Connected with the new wing will be built also a structure to serve as a whale hall, with a balcony and an arched roof through which all the light will enter and of such proportions that the length (174 feet) will be twenty feet greater than that of the wing itself and the width (120 feet) twice as great. The new wing and the whale hall are a part of the comprehensive plan which has resulted from years of careful study given to the subject by the president and trustees who constitute the committee on buildings and plans.

On the evening of April 5, the American Geographical Society and the American Museum of Natural History celebrated in the auditorium of the Museum the third anniversary of the reaching of the north pole by Rear Admiral Robert E. Peary, as well as the attainment of the south pole by Captain Roald Amundsen and the recent inauguration of the Crocker Land expedition. At the same time the Peary Arctic Club, which has for so many years given its loyalty and support to the discoverer of the north pole, publicly pronounced its appreciation of his work by presenting him with its medal of honor. This medal, a five-pointed star three and one-fourth inches in diameter, is of unusual interest because made of sections of the great Ahnighito meteorite brought by Admiral Peary from Cape York in 1897. The sections have been treated with acid to bring out the Widmanstätten lines which prove meteoric origin.

The afternoon of April 10 was set apart by the Museum as a time to give honor to John Burroughs, naturalist and author. Invitations were issued for an informal reception, at which friends gave personal greeting to Mr. Burroughs on his seventy-fifth birthday and congratulations for his share in awakening America to an appreciation of her wild animal life.

The subscriptions to the Crocker Land expedition have reached an amount that has justified the chartering of the five-hundred-ton steamship Diana of previous Arctic fame to carry the exploring party to Flagler Bay. Additional subscriptions are now needed that the expedition may be equipped for the most efficient work.

Mr. Roy C. Andrews writes from Urusan, Korea, of his unusual success in the expedition for whales. His latest letter contains an enthusiastic account of all-night work in preparation of a skeleton of a hump-back 48½ feet long. This specimen was chosen from three which had come in during the twenty-four hours, whereas only that number have been taken in all the fifteen other whaling stations during the entire year. Blue whales almost unknown in the region have been secured, as also a killer-whale of unusual size (27½ ft. long). The growing scarcity of humpbacks indicates that the effects of shore whaling are making themselves felt.

An unusually instructive new group has been installed in the hall of insect biology. It demonstrates the life history and habits of the cicada or seventeen-year locust, which is of especial interest because last year was a "locust year" in the vicinity of New York City. The long period of seventeen years is required for the underground development of a cicada brood, but there are many broods or sub-races and the history and distribution of each are on record, so that not only may the appearance of the insects above ground be at more frequent intervals than seventeen years but also each so-called "locust year" is accurately foretold. The cicada group will be described and illustrated in a later issue of the Journal.

In the auditorium of the Museum on the evening of March 28, Captain Frank E. Kleinschmidt, who has recently returned from a five months' cruise along the coasts of Siberia and Alaska, showed a series of moving pictures which gave a realistic idea of polar bears, moose, mountain sheep, walrus, and seals.

The ten-ton block of Grenville (pre-Cambrian) marble containing a glacial pot hole, which was secured in the town of Russell, St. Lawrence County, New York, has been placed in its permanent position at the east side of the archway in front of the Museum. The block was cut from the surrounding marble by the Gouverneur Marble Company and in January when the roads were frozen, was taken to the nearest railway station, loaded onto a flat car and brought to New York where a heavy six-horse truck transferred it to its new abiding place at the entrance to the Museum. The pot hole is two feet in diameter and four feet deep, carved by the swirling waters of some sub-glacial stream during the Great Ice Age, boulders, pebbles and gravel having been the grinding tools.

A large slab showing glacial grooves has been mounted opposite the glacial pot hole under the archway in front of the Museum. The grooves were made during the Great Ice Age by the action of gravel and pebbles under the glacier that covered northeastern North America. The rock is of Devonian Age, came from Kelleys Island and was a gift to the Museum in 1909 by Dr. Charles E. Slocum of Toledo, Ohio.

The Colombian expedition has sent to the Museum a collection of four hundred mammals and two thousand birds. These were collected chiefly on the Quindio trail of the Central Andes, and include specimens from the base tropical zone up to the limit of snow. The specimens from the paramo, that mountain zone lying between the upper limit of trees and the lower limit of snow (12,500 to 15,500 feet), contain many species not before represented in the Museum. The collection as a whole adds greatly to the value of preceding Colombian collections in the light thrown on distribution as affected by altitude and climatic conditions. The combined collections now give sufficient data on which to base a preliminary life-zone map of western Colombia. The expedition on February 14 abandoned Cali, which has been the base for the past year, and started for Popayan en route to the headwaters of the Magdalena Valley, which will serve as a base for future operations.

A cast of the Gangetic dolphin has been added to the exhibition of marine mammals on the third floor. This dolphin of India has never been found far out at sea, but is restricted to rivers, making seasonal migrations from the deep waters where the rivers empty into the sea to the shallows far up among the hills. The cast is a replica of an original mount in the Natural History Museum at Calcutta.

THE department of invertebrate zoölogy is engaged in a survey of the insect fauna of Florida with especial reference to its origin and present distribution. A number of entomologists are generously assisting both by field work and identification. In this connection Mr. John A. Grossbeck of the Museum and Mr. William T. Davis of Staten Island will spend April and early May chiefly in the southwestern portion of the state.

MR. MAX SCHRABISCH of Paterson, New Jersey, has filed a report of his recent work for the Museum in explorations among New Jersey rock-shelters. During the past season he found six shelters showing definite traces of having been occupied by man. Altogether this enthusiastic archæologist has located, excavated and mapped twenty-three such shelters.

THE department of mineralogy has received a large californite of gem quality through an exchange with Mr. F. A. Canfield of Dover, New Jersey.

LECTURE ANNOUNCEMENTS

PUPILS' COURSE

These lectures are open to school children when accompanied by their teachers and to children of members of the Museum on presentation of membership tickets.

Mondays, Wednesdays, and Fridays at four o'clock.

April 12 and May 3 — MR. A. E. BUTLER, "One of the Great Industries of the United States."
April 15 and May 6 — DR. L. HUSSAKOF, "Scenes from Pole to Pole."
April 17 and May 8 — MR. F. H. SMYTH, "The New York Fire Department."
April 19 and May 10 — MR. C. E. AKELEY, "African Jungle Stories."
April 22 — MR. R. W. MINER, "History of New York City."
April 24 — MR. C. E. AKELEY, "A Monkey on Safari." [A Natural History Lecture]
April 26 — MRS. A. L. ROESLER, "Early Explorers in America and the Indians."
April 29 — DR. L. HUSSAKOF, "Views in Europe."
May 1 — MISS S. WILDS, "Fairy Tales of Indians and Eskimo."

PEOPLE'S COURSE

Given in coöperation with the City Department of Education

Tuesday evenings, at 8:15 o'clock. Doors open at 7:30.

April 2 — DR. JOHN C. BOWKER, "Russia."
April 9 — DR. JOHN C. BOWKER, "Passion Play of 1910 at Ober-Ammergau."
April 16 — DR. JOHN C. BOWKER, "Ireland."
April 23 — DR. JOHN C. BOWKER, "Hindustan: a Story of Old India."
April 30 — DR. LEO S. ROWE, "The Causes and Consequences of the Recent Revolution in Mexico."

Saturday evenings at 8:15 o'clock. Doors open at 7:30.

April 6 — Subject and lecturer to be announced.
April 13 — MR. ALEXANDER T. VAN LAER, "Paintings in the Metropolitan Museum of Art."
April 20 — MR. ALFRED W. MARTIN, "The Afternoon and Evening of the Renaissance."
April 27 — MR. DON C. SEITZ, "Impressions of Japan."